## **Wireless Communication Regulations**

# A. Purpose and Intent

The general purpose of this Section is to regulate the placement, construction, installation, and appearance of wireless communications facilities in the City of Ladue. The City recognizes that the availability of wireless telecommunications services is important to the quality of life and success of commercial services within the City. Specifically, this Section intends to achieve the following:

- 1. Enable the development of wireless telecommunications services such that all residents and businesses may be served by reliable wireless services.
- 2. Guide the location and construction of telecommunications facilities such that the visual impacts are minimized, with requirements to include setbacks, landscaping, and other camouflaging requirements to ensure compatibility with the neighborhood or surrounding community to the extent possible.
- 3. Incentivize concealed communications antennas by reducing the regulatory requirements for these types of antennas.
- 4. Ensure that towers and other wireless communications facilities are soundly and carefully designed, constructed, installed, and maintained, and removed when no longer in use.
- 5. Ensure that regulation of wireless communications facilities does not have the effect of prohibiting the provision of personal wireless services and does not unreasonably discriminate among functionally equivalent providers of such service and promotes the provision and availability of communication services within the City.

# B. Applicability and Self-Preemption

The requirements of this section shall apply to all new wireless communications facilities located in the City of Ladue. Any towers or other wireless communications facilities that are legally existing prior to the passage of this ordinance but that don't fully comply with these new regulations shall be allowed to continue as nonconforming uses. Modifications shall require permits as described in Subsection E.4. Routine maintenance and repairs shall not require a permit under this Section. No provision of this Section shall apply to any circumstance in which such application shall be unlawful under superseding federal or state law and furthermore, if any subsection, sentence, clause, phrase, or portion of this Section is now or in the future superseded or preempted by state or federal law or found by a court of competent jurisdiction to be unauthorized, such provision shall be automatically interpreted and applied as required by law.

#### C. Definitions

<u>Administrative Permit.</u> An application filed for a permitted use that provides details about the proposed antenna/structure such that staff can confirm that it meets the criteria to qualify as a permitted use.

<u>Alternative Support Structure</u>. A structure other than a communication tower that may support one or more communication antennae, including, but not limited to a building or light pole. {Ord. 1752}

<u>Communication Antenna or Antenna.</u> Any device that transmits and/or receives radio waves for voice, data or video communications purposes including, but not limited to VHF and UHF

television; FM or AM radio; two-way radio, cellular telephone, personal communications services (PCS) or other wireless telephony, fixed point microwave, low power television, or other similar wireless communications and common carriers. This definition does not include small satellite dish antennae that only receive a signal, any other receive only antenna including a satellite earth station, any receive-only home television antenna, or any accessory antenna as herein defined which does not exceed 35 feet in height.

Accessory Antennas. Antennas and supporting structure attached to a building or located on the same lot as a building, designed and used for an amateur radio or citizen band radio (including such antennae used for transmitting and receiving), a similar communication device that only receives a radio frequency (RF) signal or any receive-only home television antenna.

Panel Antennas. Antennas or an array of antennas designed to concentrate a radio signal in a particular area. Panel antennae are basically flat, rectangular devices approximately six square feet in size and are commonly referred to as directional antennas.

Satellite Dish Antennas. Devices or structures used to transmit and/or receive radio, television or electromagnetic waves or signals between terrestrially and/or orbitally based uses through a reflective surface that is solid, open mesh or bar configured and generally is in the shape of a shallow dish, cone, horn, or cornucopia. This definition includes, but is not limited to, satellite earth stations, television-reception-only (TVROs), and satellite microwave antennae.

Whip Antennas. Antennas that are cylindrical in shape, less than six inches in diameter, up to 18 feet in height, and transmit signals in a 360-degree direction. Also commonly referred to as omnidirectional, stick or pipe antennae.

<u>Communication Tower.</u> A freestanding structure designed for the support of one or more communication antennae and including guyed towers, self-supporting (lattice) towers, or monopoles. This definition shall also include any tower, column, or similar structure mounted on the roof of a building and exceeding 15 feet in height above the level of the roof at the point of attachment which is designed for the support of one or more communication antennae. This definition shall not include any structure of 35 feet or less in height owned and operated by an amateur radio operator licensed by the Federal Communications Commission.

<u>Concealed Communication Antenna.</u> A communication antenna, as defined in this section, that is installed such that the antenna, mounting apparatus, and any associated equipment are fully recessed/concealed from all sides within a structure that achieves total architectural integration. (Ord. 2220)

<u>Existing Structure</u>. Any structure capable of supporting Wireless Communications Facilities (other than a Support Structure) in full conformance with the design and other requirements of this Section and is: (1) existing prior to the date of all applicable permit applications seeking City authorization for installation of such facilities thereon and (2) not built or installed in anticipation of such specific installation or erected as a means to evade approvals applicable to a non-existing structure. (Ord. 2220)

Small Wireless Facility. An Antenna and associated equipment that meets the following:

- i. An Antenna of no more than six cubic feet (6ft<sup>3</sup>) in volume; and
- ii. All other associated equipment, to the extent permitted by applicable law to be calculated, of cumulatively no more than twenty-eight cubic feet (28ft³) in volume; provided that no single piece of equipment on the Utility Pole shall exceed nine cubic feet (9ft³) in volume, and no single piece of ground mounted equipment shall exceed fifteen cubic feet (15ft³) in volume. (Ord. 2220)

<u>Stealth Communication Tower or Stealth Tower.</u> A communication tower that is designed to blend in with the surrounding environment and which conceals all communication antennae and other equipment from view. A stealth communication tower may be designed to resemble a flagpole or other object that blends into the area and cannot be identified as a Communication Tower by persons with reasonable sensibilities and knowledge.

Support Structure. A Communication Tower or Stealth Communication Tower. (Ord. 2220)

<u>Utility Pole</u>. A pole that is or may be used for wireline communications, lighting, traffic control, signage, or a similar function, which may also support a Small Wireless Facility. (Ord. 2220)

<u>Wireless Communications Facility.</u> Any Antenna, Alternative Support Structure, Small Wireless Facility, or Support Structure, and associated equipment. (Ord. 2220)

### D. Permit Requirements for Wireless Facilities

New Wireless Communications Facilities, where permitted, shall be subject to administrative review or special use permits as specified in the following table, and further described in this Section.

Zoning District	Communication Tower	Stealth Tower	Concealed Communication Antenna	Non-concealed Antenna on Alternative Support Structure	Small Wireless Facility on Utility Pole in ROW or Utility Easement
Residential Districts (A,B,C,D,E,E1)	Not permitted	Special Use Permit – on non- residential property at least 2 acres in size	Administrative Permit on property with non-residential use. (Not permitted on property with residential use.)	Only permitted on non-residential property at least 2 acres in size Administrative Permit if in compliance with E.4. Or Special Use Permit	Administrative Permit if in compliance with E.2. or Special Use Permit
Commercial G1	Not permitted	Administrative Permit	Administrative Permit	Administrative Permit if in compliance with E.4. Or Special Use Permit	Administrative Permit if in compliance with E.2. or Special Use Permit

Commercial	Special Use	Administrative	Administrative	Administrative	Administrative
G2	Permit	Permit	Permit	Permit if in	Permit if in
				compliance with	compliance
				E.4.	with E.2. or
				Or Special Use	Special Use
				Permit	Permit
Industrial (H)	Special Use	Administrative	Administrative	Administrative	Administrative
	Permit	Permit	Permit	Permit if in	Permit if in
				compliance with	compliance
				E.4. or Special	with E.2. or
				Use Permit	Special Use
					permit

## E. Administrative Permits for Communication Facilities

- The following new locations for antennas shall be considered a Permitted Use and may be permitted pursuant to an Administrative Permit to be reviewed by the City Planner and Building Department.
  - a. Small Wireless Facility on a Utility Pole in a public or private ROW or utility easement as long as it complies with Subsection E.2.
  - b. Stealth Towers in Commercial and Industrial Zoning (Requirements in Subsection E.3)
  - c. Concealed Communication Antenna (as defined in Subsection C.) in a commercial or industrial zoning district or on a non-residential property in a residential zoning district. (Requirements in Subsection E.3)
  - d. A non-concealed antenna that meets the setback and height requirements in Subsection E.3.b. and is located in a commercial or industrial zoning district or on a non-residential property at least 2 acres in size. (Requirements is Subsection E.4.)
  - e. Additional or replacement equipment on existing support structures unless such application qualifies as a "substantial modification" and exceeds the maximum height limit to be considered a permitted use. (Requirements in Subsection E.5)

#### 2. Permitted Small Wireless Facility

Small Wireless Facilities located in any zoning district placed on an existing Utility Pole or a new or modified Utility Pole shall be permitted with an Administrative Permit and shall comply with the following requirements.

- a. A new or modified Utility Pole shall not exceed fifteen (15) feet in height above the tallest existing Utility Pole within a ¼ mile radius of the proposed Utility Pole or a height of 50 feet, whichever is greater.
- b. To the extent not prohibited by applicable law, the appearance of any new, modified, or replacement Utility Pole shall conform to Chapter 90 of the Ladue Code of Ordinances regarding Utility Poles in the right-of-way. Antenna, equipment, and cables shall be painted and/or designed to blend with the Utility Pole to the extent practical.

- Equipment shall be placed in a location to be unobtrusive to those who may view it (i.e., facing away from oncoming traffic or facing away from the roadway).
- c. Facility shall not materially interfere with the safe operation of traffic and control equipment or City-owned communications equipment.
- d. Facility shall not materially interfere with compliance with the American Disabilities Act, or similar federal or state standards regarding pedestrian access or movement.
- e. Facility shall not materially obstruct or hinder the usual travel or public safety on the rights-of-way or conflict with any proposed rights-of-way improvement project, such as a bike path.
- f. Facility shall not materially obstruct the legal use of the rights-of-way by the City, utility, or other third-party.
- g. Facility shall comply with the spacing requirements, which require that new Utility Poles not be spaced closer than 200 feet, as described in Chapter 90 of the Ladue Code of Ordinances.
- h. Facility shall comply with applicable national safety codes, including recognized engineering standards for Utility Poles.
- i. Facility shall comply with the decorative pole replacement and other beautification requirements as described in Chapter 90 of the Ladue Code of Ordinances.
- j. Facility shall comply with undergrounding requirements within Chapter 90 of the Ladue Code of Ordinances.
- k. Facility shall not result in the interference or impairment of the operation of existing utility facilities, or City or third-party attachments.
- No trees or other vegetation may be removed from the right-of-way without the owner's consent. New Utility Poles shall be located outside of the drip line of existing trees to prevent root disturbance.
- m. An Applicant may simultaneously submit no more than 20 applications for Small Wireless Facilities, or may file a single, consolidated application covering such Small Wireless Facilities, provided that the proposed Small Wireless Facilities are to be deployed on the same type of structure using similar equipment and within an adjacent, related geographic area of the City. The Applicant shall pay the application fee as required on the application form.

- 3. Stealth Towers in Commercial and Industrial Zoning Districts
  A Stealth Communication Tower as defined in Subsection C shall be considered a Permitted Use in the G1, G2, and H Zoning Districts, when in compliance with the following:
  - a. Stealth Communication Tower shall not exceed 85 feet in height above the ground.
  - b. The Stealth Communication Tower shall be set back from all property lines a minimum of one (1) foot for every foot of tower height. No stealth Communication Tower shall be located within 150 feet of any residential structure.
  - c. The design of the Stealth Tower shall maximize use of building materials, colors, textures, screening and landscaping that effectively blend the tower facilities with the surrounding natural setting and built environment and conceal the Communication Antennas and other equipment. Landscape plans shall be required and shall be reviewed according to the City's landscape review process for new structures.
  - d. Stealth Towers shall be reviewed by the Architectural Review Board to determine whether the structures are adequately blended with the surrounding setting and built environment.
  - e. If the applicant desires a height greater than 85 feet, applicant can apply to the Zoning and Planning Commission for a waiver to allow additional height upon good cause shown.
  - f. All accessory uses shall be subject to setback requirements generally applicable to principal uses in the district and no accessory building or structure shall exceed ten (10) feet in height. Any equipment shelter structures or buildings, fencing, and/or similar structures or improvements constituting accessory uses shall be located on the same parcel of land occupied by the Stealth Communication Tower and suitably screened.
  - g. No advertising signs or lighting shall be allowed on the Stealth Communication Tower.
  - h. No outdoor storage shall be allowed on the site containing the Stealth Communication Tower.
- 4. Permitted Concealed Communication Antennas

  The mounting of a Concealed Communication Antenna on any existing and conforming building or structure not located in a right-of-way or utility easement in the G1, G2, and H Zoning

Districts or in a residential district on a non-residential property, shall be permitted, subject to Administrative Review, according to the following:

- a. Changes to the structure to accommodate a concealed antenna must be reviewed and approved by the Architectural Review Board.
- b. The portion of the structure housing the concealed communications antennae may exceed the building height limitation provided that the concealed communication antenna is housed and concealed completely within certain architectural features on a building.
- c. The proposed height and appearance of the architectural feature shall be architecturally compatible with the building, of a type and nature commonly found on such buildings and does not distract from the view of the surrounding area.
- d. The proposed height, appearance, and materials of the architectural feature shall be compatible with the design, appearance, materials, and dimensions of the building.
- e. Erection of the proposed architectural feature and concealed communication antenna at the proposed location will not be detrimental to the surrounding property values or uses, as determined by the Architectural Review Board.
- f. All cable must be routed internally, unless otherwise approved by the Architectural Review Board.
- g. The associated equipment must be completely concealed inside an existing building or inside an underground vault. Screen walls/fences and prefabricated facilities will not be allowed. Equipment enclosures designed to replicate existing buildings and structures may be considered by the Architectural Review Board but must demonstrate compatibility with the surrounding area.
- 5. Certain Non-Concealed Antennas (if in compliance with this Subsection E.4)
  If Antenna does not meet the requirements to be considered a Concealed Communication
  Antenna, Antenna may be considered a permitted use if it complies with the following:
  - a. Antenna is not more than 10 feet above the height of the roof on which it is mounted.
  - b. Antenna is setback no less than 20 feet from any edge of the building, with the total height not to exceed 60 feet from ground level.
- 6. Additions, Modifications, and Replacement Permitted

It shall be permitted to attach additional or replacement complying Antenna or equipment to any existing fully conforming Support Structure or as otherwise authorized by state or federal law where local zoning is preempted, provided that building permit requirements, national safety codes, and other applicable codes including recognized accepted industry standards for structural, safety, and engineering are satisfied, as demonstrated by a certified structural engineering report. An Administrative Permit application and additional information shall be submitted in order to demonstrate that the proposed facility meets the requirements of this Subsection.

- F. Special Use Permit Requirements for Wireless Facilities.
  - 1. The following new locations for Wireless Communications Facilities shall require a Special Use Permit in compliance with Section VII.
    - a. Communication Tower in the G2 or H zoning districts. (Requirements in Subsection F2.)
    - b. Stealth Tower in a residential zoning district on a non-residential property at least 2 acres in size. (Requirements in Subsection F.3.)
    - c. Communication Antenna on an existing structure that does not meet the criteria in Subsection E.3. (Requirements in Subsection F.4.)
    - d. Small Wireless Facilities in any zoning district that do not meet the criteria for a permitted use listed in Subsection E.2. (Requirements in Subsection F.5.)

#### Communication Tower

A Communication Tower that does not meet the definition of a Stealth Communication Tower and is to be erected as a stand-alone structure, may be allowed by Special Use Permit in G2 and H zoning districts, but must be in compliance with the following:

- a. Communication Tower shall not exceed 100 feet in height above the ground.
- b. Communication Tower shall be set back from all property lines a minimum of one

   (1) foot for every foot of structure height. No Communication Tower shall be
   located within 200 feet of any residential structure.
- c. Communication Tower shall be designed as a monopole and shall maximize use of building materials, colors, textures, screening, and landscaping that effectively blend the tower facilities with the surrounding natural setting and built environment.
- d. All accessory uses shall be subject to height and setback requirements generally applicable to principal uses in the district. All equipment shelter structures or buildings, fencing, and similar structures or improvements constituting accessory uses shall be located on the same parcel of land occupied by the Communication Tower.
- e. No advertising signs or lighting shall be allowed on the Communication Tower.

- f. No outdoor storage shall be allowed on the site containing the Communication Tower.
- g. The site containing the Communication Tower shall be surrounded by a sight-proof fence or evergreen plant material of at least six feet in height.
- h. The Communication Antennas on Communication Towers shall be limited to whip and panel antennae.

#### 3. Stealth Communication Tower

A Stealth Communication Tower, as defined in Subsection C., on a residential property at least 2 acres in size shall be considered for a Special Use Permit when in compliance with the following:

- a. Stealth Communication Tower shall not exceed 85 feet in height above the ground.
- The Stealth Communication Tower shall be set back from all property lines a minimum of one (1) foot for every foot of tower height. No stealth Communication Tower shall be located within 150 feet of any residential structure.
- c. The design of the Stealth Tower shall maximize use of building materials, colors, textures, screening and landscaping that effectively blend the tower facilities with the surrounding natural setting and built environment and conceal the Communication Antennas and other equipment. Landscape plans shall be required and shall be reviewed according to the City's landscape review process for new structures.
- d. Stealth Towers shall be reviewed by the Architectural Review Board to determine whether the structures are adequately blended with the surrounding setting and built environment.
- e. If the applicant desires a height greater than 85 feet, the Zoning and Planning Commission may grant a waiver to allow additional height upon good cause shown.
- f. All accessory uses shall be subject to setback requirements generally applicable to principal uses in the district and no accessory building or structure shall exceed ten (10) feet in height. Any equipment shelter structures or buildings, fencing, and/or similar structures or improvements constituting accessory uses shall be located on the same parcel of land occupied by the Stealth Communication Tower and suitably screened.

- g. No advertising signs or lighting shall be allowed on the Stealth Communication Tower.
- h. No outdoor storage shall be allowed on the site containing the Stealth Communication Tower.
- 4. Communication Antenna (not Concealed)
  - If a Communication Antenna is attached to a building or other Alternative Support Structure outside of a utility easement or right-of-way and does not meet the requirements of a Concealed Communication Antenna or the other requirements for an Antenna on a non-residential structure listed in Subsection E.4., it may be approved with a Special Use Permit in the G1, G2, and H districts or in a residential district on a property at least 2 acres in size with a non-residential use. Requirements are as follows:
    - a. Communication Antennas may exceed the height limitation provided that no equipment shall exceed 15 feet in height as measured from the roof of a building, top of an architectural feature, or top of an Alternative Support Structure and a total height of seventy (70) feet above the ground.
    - b. The design of any Communication Antenna shall maximize use of building materials, colors, textures, screening, and landscaping that effectively blend the Communication Antenna with the surrounding natural setting and built environment.
    - c. No separate on-site support building is necessary for operation of the Communication Antenna, or any necessary support storage area is located underground.
    - d. Other equipment necessary for the operation of the Communication Antenna shall be relatively small and able to be mounted on or within the Alternative Support Structure and screened from view.
- 5. Small Wireless Antennas in Right-Of-Way or Utility Easement approved by Special Use Permit A Small Wireless Facility that does not meet all the requirements to be a permitted use according to Subsection E.2. shall be allowed only with a Special Use Permit. This includes new or modified Utility Poles that exceed fifteen (15) feet in height above the tallest existing Utility Pole within a ¼ mile radius of the proposed Utility Pole or a height of 50 feet, whichever is greater. Applications shall be reviewed, as follows:
  - c. All equipment necessary for the operation of the Communication Antenna shall be the same color as the Utility Pole or Alternative Support Structure and maintained the same color. Equipment shall be placed in a location to be unobtrusive to those who may view it (i.e., facing away from oncoming traffic or facing away from the roadway).

- d. New Utility Poles may be installed for the purpose of attaching a Small Wireless Facility or existing Utility Poles may be used and increased in height for the purpose of attaching a Small Wireless Facility, up to a maximum height of 70 feet.
- e. If a proposed pole height is above 70 feet, the Zoning and Planning Commission may grant a waiver to allow additional height upon good cause shown.
- f. To the extent not prohibited by applicable law, the provisions of this Sub-section shall not apply to Wireless Communications Facilities used by the City of Ladue; however, the City shall remain subject to the other requirements concerning special uses.
- g. All poles and equipment placed in the right-of-way must also comply with the right-of-way permitting requirements in Chapter 90 of the Ladue Code of Ordinances.

## G. Application Process and Requirements

- 1. Applications for Wireless Communication Facilities shall be required along with the following information:
  - a. An application fee as stated on the application, but not to exceed such amounts as may be limited by law.
  - b. Applicants' and consultants' contact information as required on the form provided.
  - c. A site plan that indicates the exact location of the facility and existing and proposed improvements near the proposed facility, such as drives, walkways, parking areas, and other structures. Details on the site plan must be sufficient to determine compliance with setbacks and other requirements. Plan shall also indicate the location of all property lines, rights-of-way, the zoning categories of the subject and adjoining properties, and the coordinates and height AGL of the existing Utility Pole or other structure upon which the Antennas are proposed to be attached.
  - d. Specifications, dimensions, photos, and drawings of the completed installation.
  - e. Copy of the authorization for use of the property from the owner of the property on which the Wireless communications Facility will be placed or attached, including the real property and the owner of any applicable Support Structure, Alternative Support Structure, or Utility Pole.
  - f. A structural report performed by a duly licensed engineer evidencing that the proposed structure can structurally support the Wireless Communication Facilities (or that such structure will be modified to meet structural requirements) in accordance with applicable Codes.
  - g. For any application for a Small Wireless Facility, the applicant shall provide an attestation that the proposed Small Wireless Facility complies with the volumetric

limitations as required to meet the definition of a Small Wireless Facility in accordance with this Ordinance and pursuant to applicable law.

- h. All other information necessary to show compliance with the applicable requirements of this Section.
- For wireless facility applications that require a Special Use Permit, applications submitted at least 25 days prior to a Zoning and Planning Commission meeting shall be placed on that meeting agenda.
- 3. For wireless facility applications that require an Administrative Permit, the Planner shall issue a decision on the application for a permitted use within 30 days. A decision to deny an application shall be made in writing and state the specific reasons for the denial.
- 4. Unless otherwise agreed to in writing by the City or prohibited by applicable law, material changes to an application, as determined by the City in its sole discretion, shall be considered a new application for purposes of the time limits required by applicable law.

#### H. Removal of unused facilities

When any antenna or Wireless Communication Facility shall no longer be *used for* its original communications purpose, the owner of such structure, or the last lessee, licensee, or user thereof, or the owner of the site on which the same is located shall be obligated, jointly and severally, at their expense to dismantle and remove promptly such Antenna or Wireless Communications Facility from its site.

- The licensed telecommunications user of such Antenna or Wireless Communications Facility shall provide the city with a copy of the notice to the FCC of intent to cease operations thereon and shall have ninety (90) days from cessation of operations to complete the dismantling and removal of its equipment and the Antenna or Wireless Communications Facility from the site.
- 2. After removal of facility/equipment, structure/site shall be returned to its original condition prior to installation of the Wireless Communications Facility.
- 3. If the Antenna or Wireless Communications Facility is not removed, the city reserves the right at any time thereafter and after giving thirty (30) days written notice to the interested parties, to enter the property and remove the Antenna or Wireless Communications Facilities, to charge the costs to the last lessee, licensee, or user thereof or the owners, and to place a lien in the amount of the costs against the property of the owner of the site.